

12/18/2008

Application No. 10/538,763

Confirmation No. 5550

Applicant: Steven D. SLONAKER

Attorney Docket No. P27955

Title: METHOD AND SYSTEM FOR RECONSTRUCTING ABERRATED

IMAGE PROFILES THROUGH SIMULATION

Responsive to Official Communication dated: June 24, 2008

REPLACEMENT SHEET

fig 1a      aerial image intensity vs. horizontal position  
                  grouped by defocus level  
                  pattern 1  
                  aerial image intensity vs. horizontal position and focus  
                  no aberration case

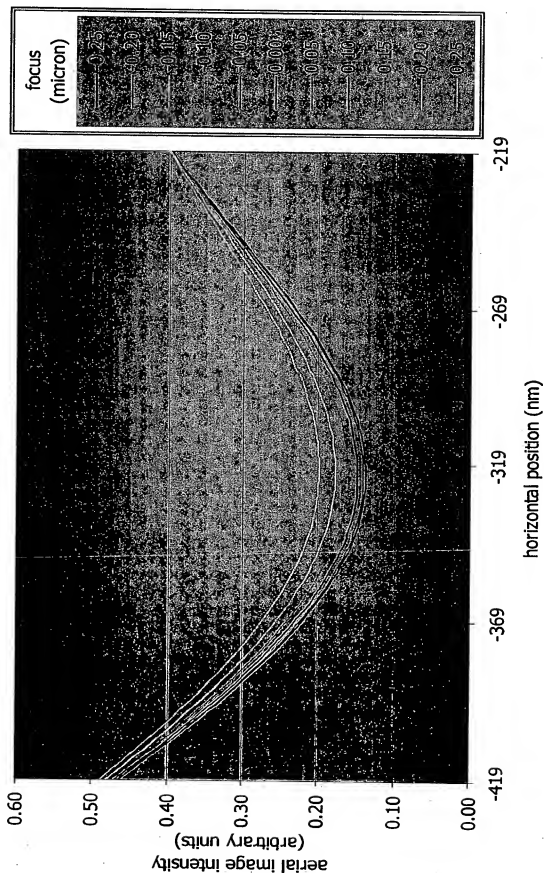


fig 1b

aerial image intensity vs. focus  
grouped by horizontal pixel position

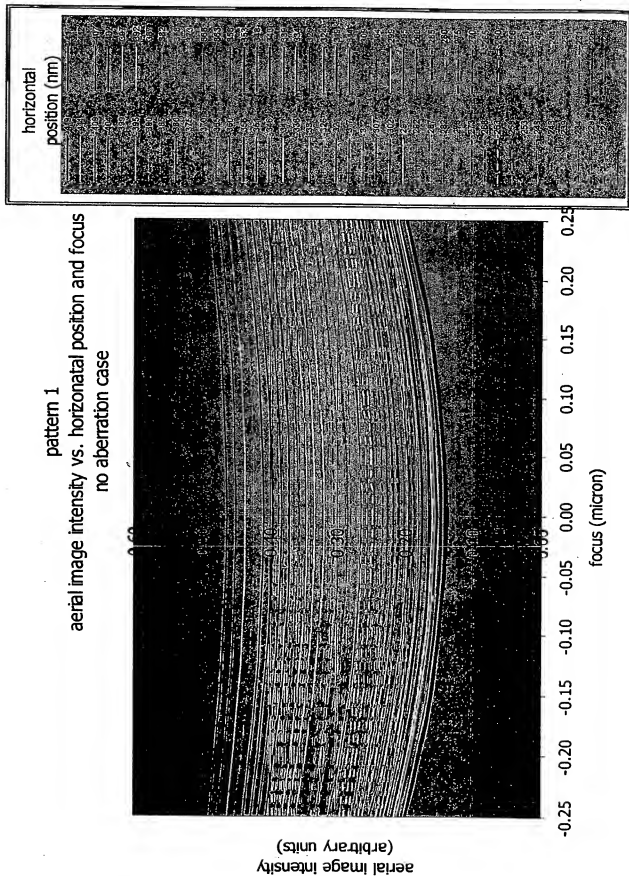
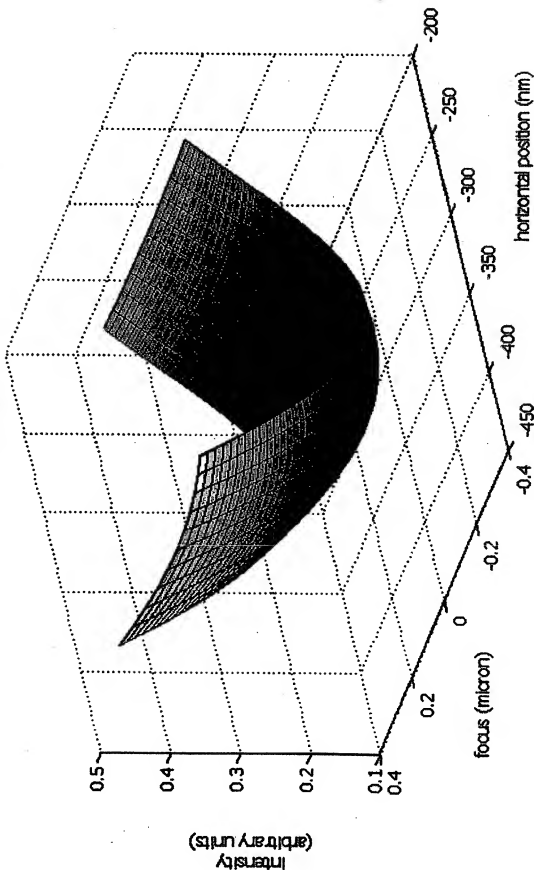


fig 2 aerial image intensity vs. horizontal position and focus

surface plot  
 pattern 1

aerial image intensity vs. horizontal position and focus  
 no aberration case



Zernike 2 -0.025 waves rms

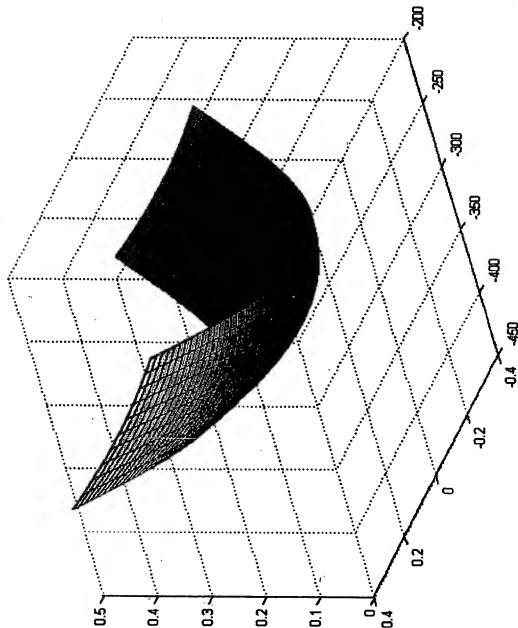
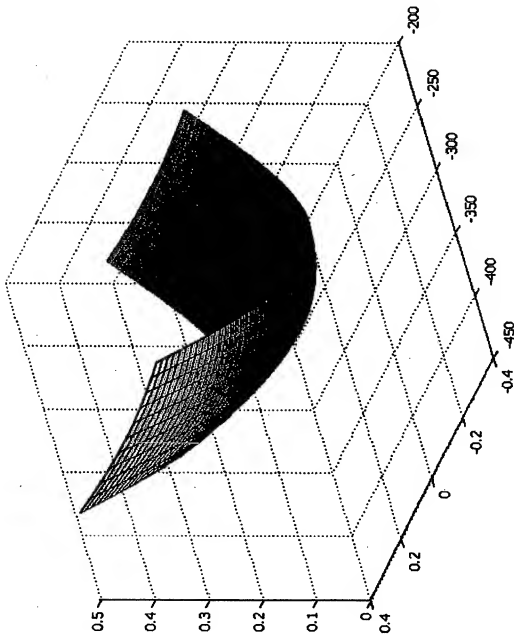


fig 3a

fig 3b

Zernike 2 -0.020 waves rms



Zernike 2 -0.015 waves rms

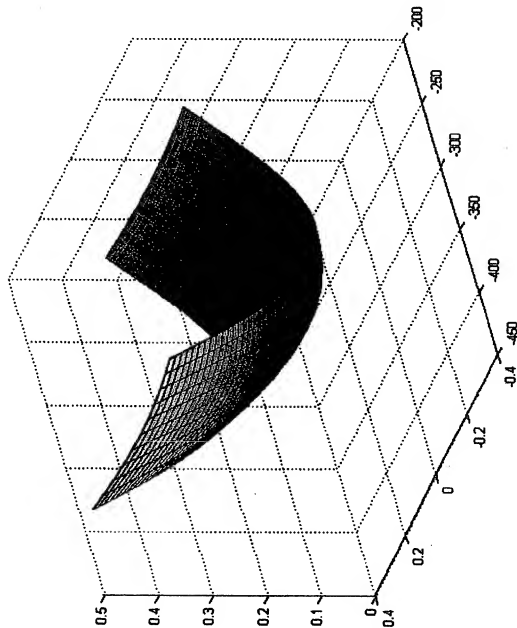


fig 3c

Zernike 2 -0.010 waves rms

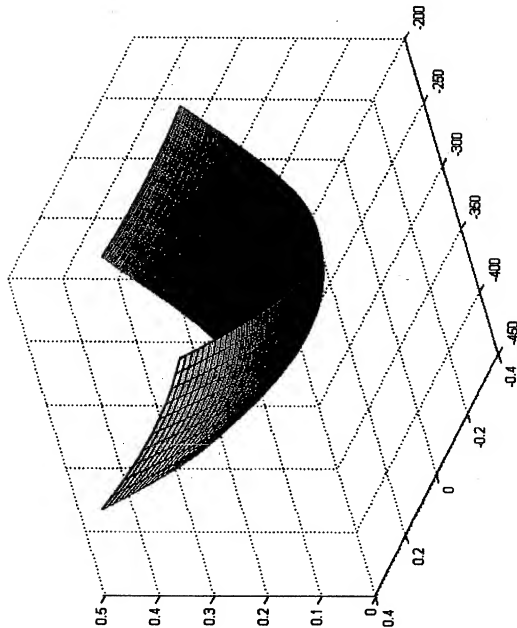


fig 3d

fig 3e

Zernike 2 -0.005 waves rms

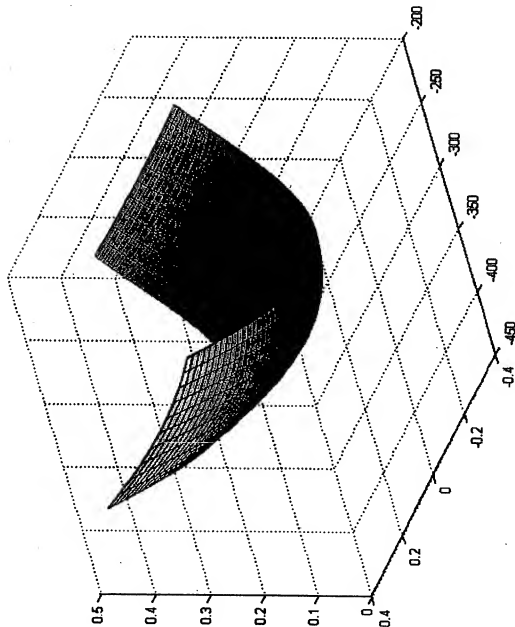
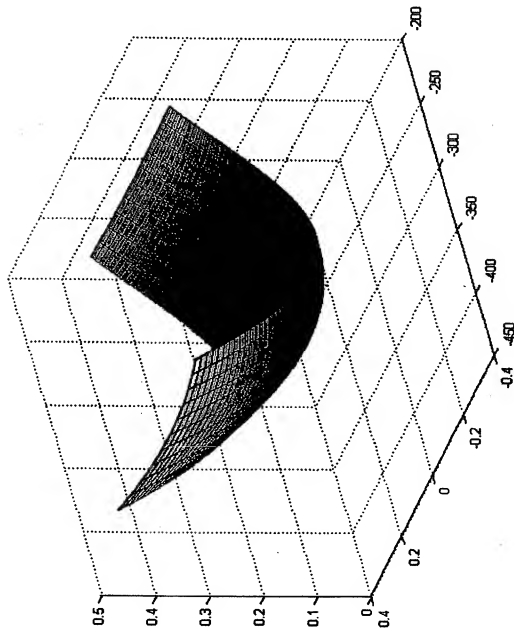




fig 3f

Zernike 2 0 waves rms (=no aberration case)



Zernike 2 +0.005 waves rms

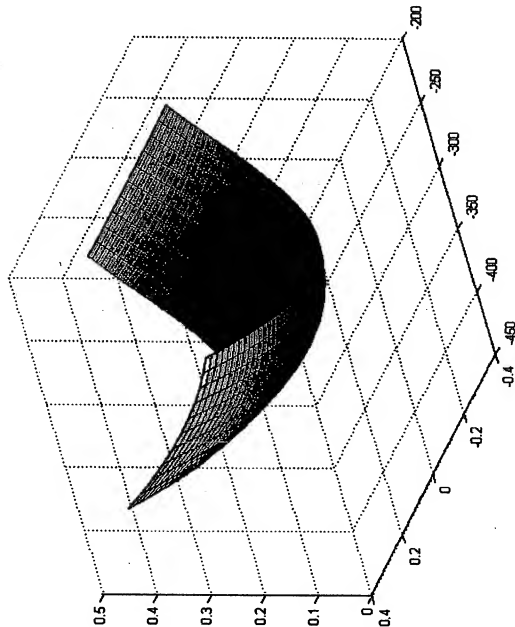


fig 3g

fig 3h

Zernike 2 +0.010 waves rms

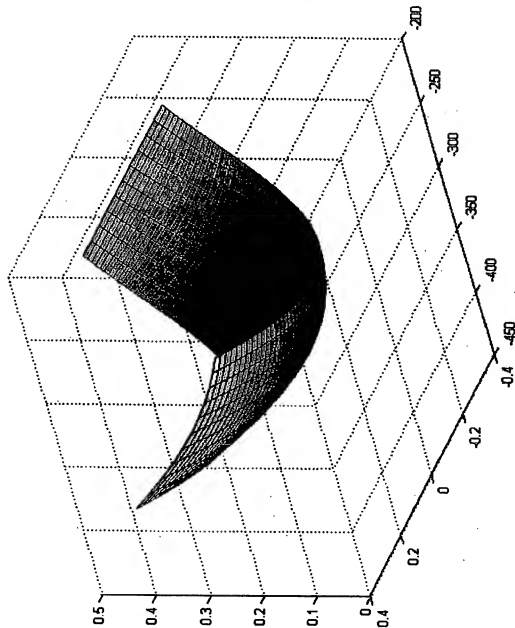


fig 3i

Zernike 2 +0.015 waves rms

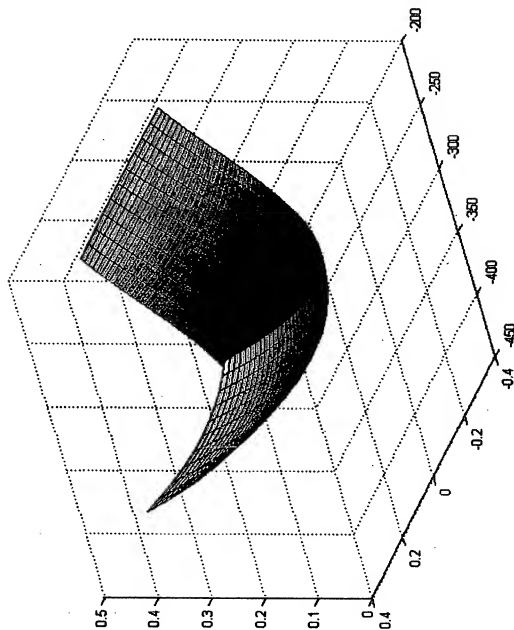


fig 3j

Zernike 2 +0.020 waves rms

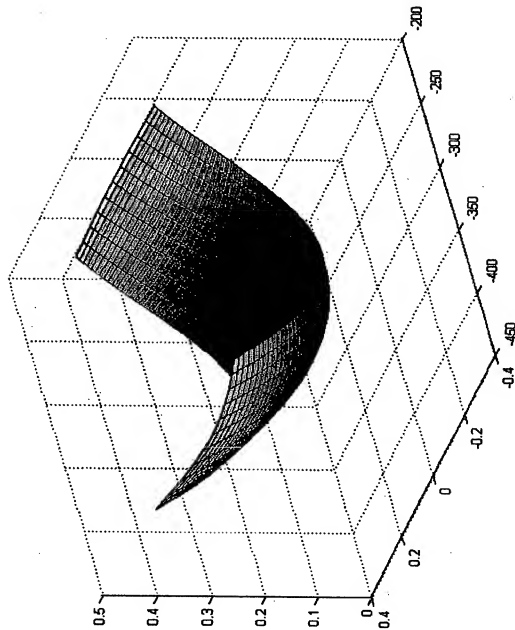


fig 3k

Zernike 2 +0.025 waves rms

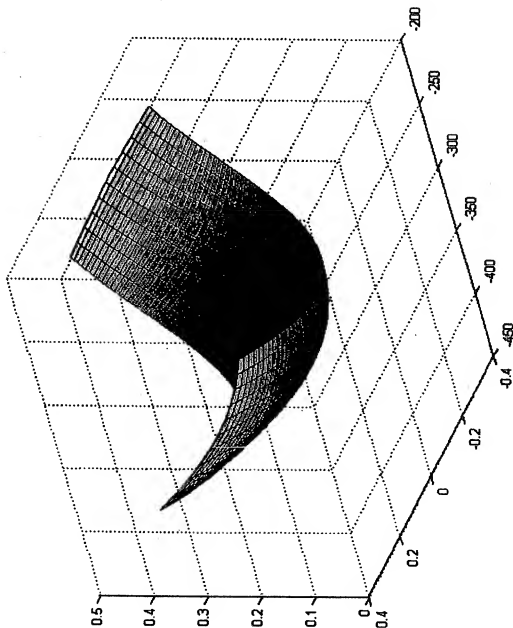


fig 4a

Zernike 2 -0.025 waves rms

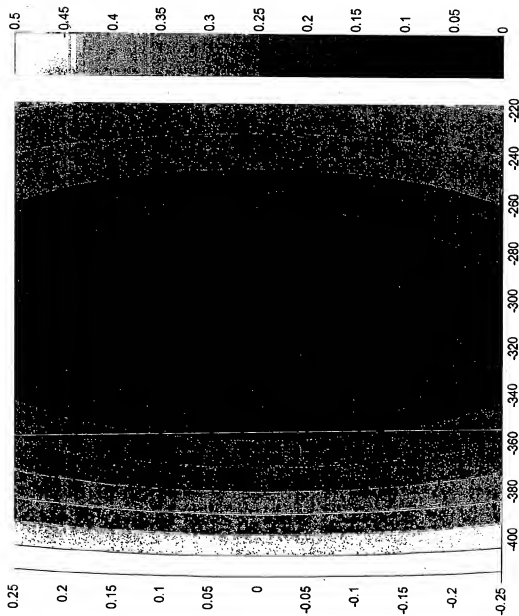


fig 4b

Zernike 2 -0.020 waves rms

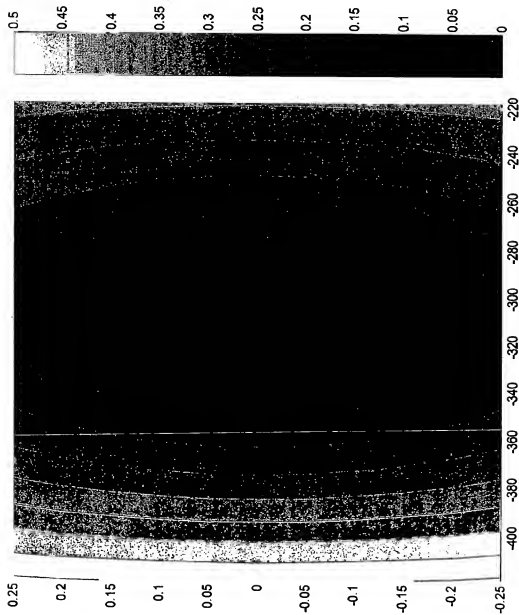




fig 4c

Zernike 2 -0.015 waves rms

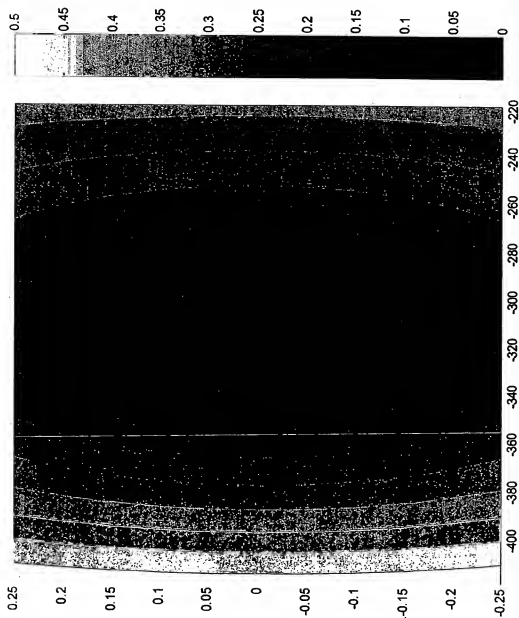


fig 4d

Zernike 2 -0.010 waves rms

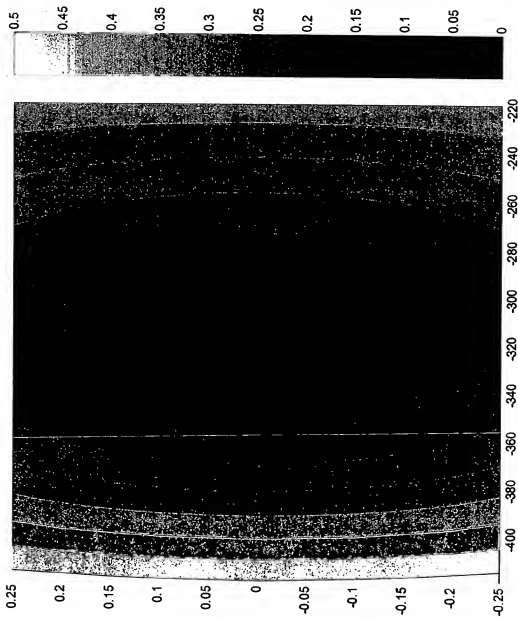


fig 4e

Zernike 2 -0.005 waves rms

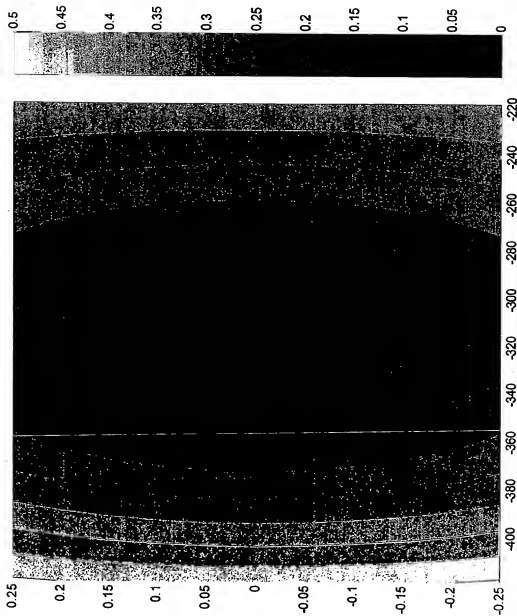


fig 4f

Zernike 2 0.0 waves rms =no aberration case

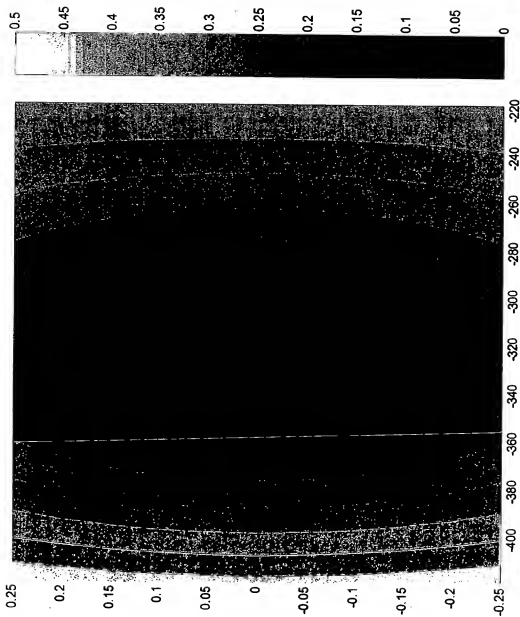


fig 4g

Zernike 2 +0.005 waves rms

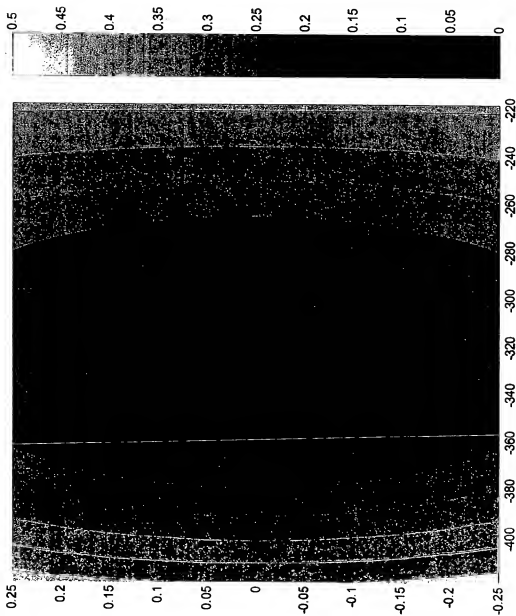


fig 4h

Zernike 2 +0.010 waves rms

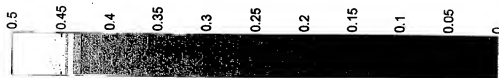
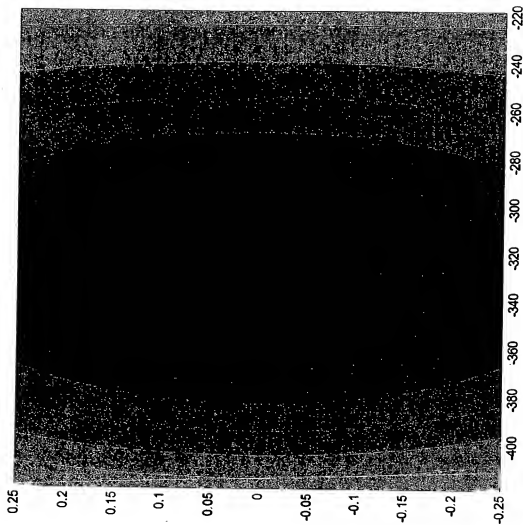


fig 4i

Zernike 2 +0.015 waves rms

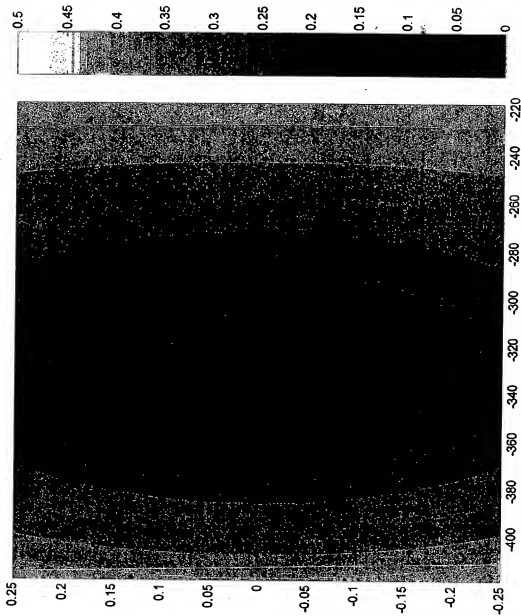


fig 4j

Zernike 2 +0.020 waves rms

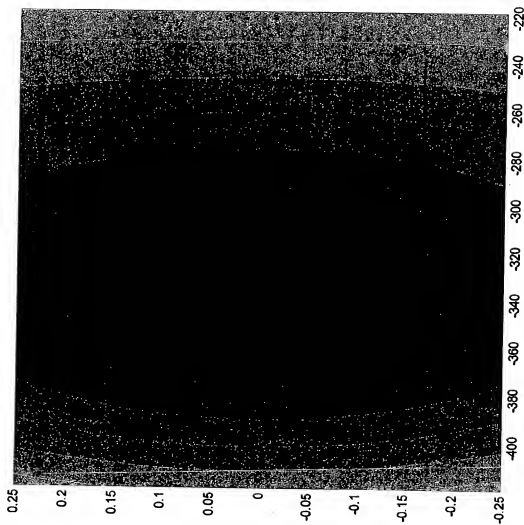
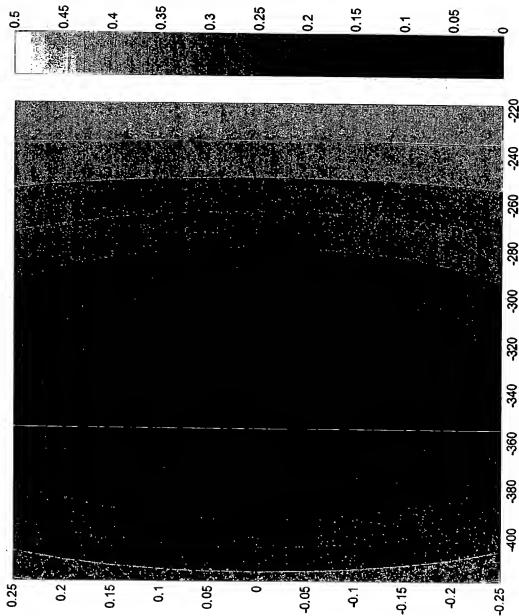




fig 4k

Zernike 2 +0.025 waves rms



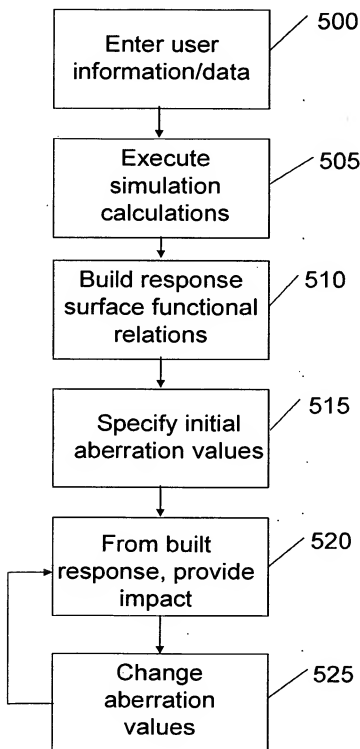


Figure 5